REMARKS

Claims 1-9, 11, 20-33, 37-55 and 59-69 are pending. Applicants elect Group 1 (claims 1-9, 11, 20-21, 28-33, 51-59 and 64-68) for examination with traverse. For the sake of completeness, if Applicants traversal of the restriction requirement results in examination of claims outside of Group 1, an election of species is made for each of the claims and the claims readable thereon are listed.

Group 1 - claims 1-9, 11, 20-21, 28-33, 51-59 and 64-68 read on one or more of the following species.

Claim 1(ii)(b) and Claim 2: SEQ ID NO: 512

Claim 1(ii)(c) and Claim 7: SEQ ID NO: 50

Claims 5 and 6 - SEQ ID NO: 209

Claim 8 - SEQ ID NO: 50

Claim 33 - SEQ ID NO: 519

Group 2 - claims 37-41 read on one or more of the following species.

Claim 37 - SEQ ID NO: 209

Claim 38 and 39 - SEQ ID NOS: 219, 247 and 269 (n.b. there is a typo in the requirement because it lists only two of the four species)

Claim 40 - SEQ ID NO: 318

Claim 41 - SEQ ID NO: 295

Group 3 - claims 42-46 read on one or more of the following species.

Claim 42 - SEQ ID NO: 322

Claim 43 - SEQ ID NOS: 93, 333 and 341 (n.b. there is another typo in the requirement because it lists only two of the three species)

Claim 44 - SEQ ID NO: 322 and SEQ ID NOS: 93, 333 and 341

Claim 45 - SEQ ID NO: 370

Claim 46 - SEQ ID NO: 348

Group 4 - claims 47-50 read on one or both of the following species.

Claim 48 - SEQ ID NOS: 391, 382 and 378

Claim 50 - SEQ ID NO: 406

Applicants reserve the right to prosecute nonelected subject matter in a further patent application.

The Sequence Listing is corrected for SEQ ID NOS: 518, 520, 522 and 524 to 526. Their amino acid sequences are provided on page 123 of the specification. But as originally listed, they only contain the sequence of the FR4 region of the light chain variable regions instead of the entire VL region. This is corrected in the attached. Paper and computer readable forms of the Sequence Listing do not add new matter, and their contents are the same. It is respectfully submitted that the attached complies with 37 CFR § 1.821 et seq. Otherwise, prompt notice of any defects in the Sequence Listing is earnestly solicited and additional time is requested to comply.

Notwithstanding the above election, Applicants submit that examination of claims 1-9, 11, 20-33, 37-55 and 59-69 would not constitute a serious burden. Although inventions identified by the Examiner are separately patentable, both the need for compact prosecution and the public interest would be served by examination of all claims in a single application. The antibody or antibody fragment of Groups 1 to 4 is directed to specific embodiments of the invention described generically in claim 1; the methods of Groups 5 and 6 are directed to uses of the antibody or antibody fragment of claim 1. Moreover, the generic or linking claim 1 is further evidence of unity of invention; thus, examination should proceed under the provisions of M.P.E.P. § 809. Unity of invention is not lacking in view of Cho *et al.* for the reasons discussed below.

Applicants disagree with the allegation in the Action that the pending claims lack unity of invention, and therefore belong to different groups of inventions. The traversal is based on the pending claims being so linked as to form a single general inventive concept under PCT Rule 13.1. Therefore, Applicants submit that the pending claims should be examined together in this application.

In particular, the inventions listed as Groups 1 to 4 in the Action relate to a single general inventive concept. The special technical feature shared by the claims is an antibody or antibody fragment that binds to the C-terminal domain of Apolipoprotein E (ApoE-CTD) and binds to human plaques. All of Groups 1-6 pertain to the same genus of antibody or antibody fragment. Their features are specifically recited in claim 1. But

the antibody or antibody fragment of the claims of Groups 2 to 4 all have these properties, either explicitly or implicitly. This is clear from the Examples of Applicants' specification.

The claims of Group 2 are directed to an antibody or antibody fragment which comprises the heavy chain CDR1 sequence shown in SEQ ID NO: 24, the heavy chain CDR2 sequence shown in SEQ ID NO: 25, and the heavy chain CDR3 sequence shown in any one of SEQ ID NOS: 207, 209 and 210. These claims are directed to affinity-matured clones of monoclonal antibody 807A-M0028-B02. Table 38 at page 144 of Applicants' specification indicates that the affinity-matured clones of monoclonal antibody 807A-M0028-B02 all have the heavy chain CDR1 and CDR2 sequences shown in SEQ ID NOS: 24 and 25 and the heavy chain CDR3 sequence shown in one of SEQ ID NOS: 207 to 210. The Examples demonstrate that the affinity-matured 807A-M0028-B02 antibodies bind to ApoE-CTD and human plaques. Table 36 (third panel) at page 142, Table 37 at page 143, and page 85, lines 16-29, of the specification show the data relating to the parental antibodies and the improved ApoE-CTD binding properties of the antibodies listed in Table 38 are described at page 88, line 8, to page 89, line 24, of the specification. Furthermore, claim 5 which belongs to Group 1 specifies that the heavy chain CDR3 sequences may comprise the sequences shown in SEQ ID NOS: 207, 209 and 210. Thus, the claims of Group 2 share subject matter with the elected invention.

The claims of Group 3 are drawn to an antibody or antibody fragment comprising the heavy chain CDR1 sequence shown in SEQ ID NO: 48, the heavy chain CDR2 sequence shown in SEQ ID NO: 49, and the heavy chain CDR3 sequence shown in any one of SEQ ID NOS: 320, 322 and 323. The claims are drawn to affinity-matured antibodies derived from antibody 807B-M0028-A03. As indicated in Table 39 of Applicants' specification, the affinity-matured clones of monoclonal antibody 807B-M004-A03 have the heavy chain CDR1 sequence shown in SEQ ID NO: 48, the heavy chain CDR2 sequence shown in SEQ ID NO: 49, and the heavy chain CDR3 sequence shown in one of SEQ ID NOS: 320 to 323. The Examples demonstrate that affinity-matured clones of antibody 807B-M004-H03 bind to ApoE-CTD and human plaques (see Tables 36 and 37 at pages 142-143; page 85, lines 16-29; and page 88, line 8, to page 89, line 24, of

the specification). Furthermore, claim 5 which belongs to Group 1 specifies that the CDR3 region may comprise the sequence shown in SEQ ID NO: 320, 322 or 323. Thus, the claims of Group 3 share subject matter with the elected invention.

The claims of Group 4 are drawn to an antibody or antibody fragment comprising the heavy chain CDR1 sequence shown in SEQ ID NO: 66, the heavy chain CDR2 sequence shown in SEQ ID NO: 67, and the heavy chain CDR3 sequence shown in SEQ ID NO: 373. As shown in Table 40 of Applicants' specification, affinity-matured clones of monoclonal antibody 807B-M004-H03 have the heavy chain CDR1 and CDR2 sequences shown in SEQ ID NOS: 66 and 67 and a heavy chain CDR3 sequence that may be the one shown in SEQ ID NO: 373. The Examples demonstrate that affinity-matured antibodies derived from 807B-M004-H03 having the sequences recited in claim 47 bind to ApoE-CTD and human plaques (see Tables 36 and 37 at pages 142-143; page 85, lines 16-29; and page 88, line 8, to page 89, line 24, of the specification). Furthermore, claim 5 which belongs to Group 1 specifies that the CDR3 region may comprise the sequence shown in SEQ ID NO: 373. Thus, the claims of Group 4 share subject matter with the elected invention.

Therefore, the antibody or antibody fragment of Groups 2 to 4 are clearly related to the antibody or antibody fragment of Group 1. The claims of Group 2 to 4 should be examined in this application along with the elected invention because they contain overlapping subject matter.

Cho *et al.* (J. Neuropathol. Exp. Neurolog. 60:342-349, 2001) was cited as allegedly teaching the special technical feature(s) of Groups 1 and 5-6: i.e., a human antibody to the ApoE C-terminal domain that binds to human plaques and methods of its use. But Cho *et al.* does not disclose any human antibody. Cho *et al.* disclose a single antibody that binds to ApoE-CTD. That antibody 3H1 is a mouse monoclonal antibody against residues 243-272 of ApoE (see Cho *et al.* at page 342, right column, last paragraph, lines 4-5). In addition, Cho *et al.* only disclose the use of this antibody to analyze ApoE metabolism in amyloid deposits and to investigate the distribution of C- terminal domains. Cho *et al.* does not teach or suggest that the mouse antibody 3H1 is used in methods of treating or diagnosing amyloid disorders. Since Cho *et al.* does not disclose

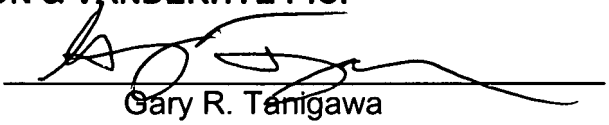
a human ApoE antibody that is useful in methods of treating or diagnosing amyloid disorders, it does not recite the special technical feature(s) of Groups 1 and 5-6 (or that it was disclosed in the prior art) and, thus, the pending claims are directed to a single general inventive concept.

Finally, under the Commissioner's Notice of March 26, 1996 (1184 OG 86) implementing the Federal Circuit's decisions of *In re Ochiai*, 37 USPQ2d 1127 (1995) and *In re Brouwer*, 37 USPQ2d 1663 (1996), Applicants request rejoinder of the nonelected method claims upon an indication that an elected product claim is allowable.

Applicants earnestly solicit an early and favorable examination on the merits. The Examiner is invited to contact the undersigned if any further information is required

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 

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